

## IV

# THE ÆTIOLOGY AND TREATMENT OF PROSTATITIS AND VESICULITIS

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MADAM PRESIDENT, LADIES AND GENTLEMEN,—It was with a certain feeling of responsibility and trepidation that I accepted your Secretary's invitation to address your Society: of responsibility because I am aware of the standard of the papers read at your meetings; of trepidation because it is difficult for one who is not a venereal disease specialist to interest those who are, and therefore I hope you will accept my remarks as coming from one who, though a urologist, has had some experience in venereal disease.

We do not see at the present day so many severe cases of prostatitis and vesiculitis as we were accustomed to see, say, fifteen years ago, and there can be no doubt that the reason for that is the better treatment of gonorrhœa, for which this Society is largely responsible.

The prostatic and vesicular region is one of the great distributing centres of sepsis, and as such occupies a place similar to that embodying the tonsils, nasal sinuses and teeth. Involvement of the joints and eyes from chronic infection in the lower urinary tract is fairly common, while in renal infections such complications are very rare.

## ÆTIOLOGY

Congestion of the prostate appears to be confused sometimes with inflammation of the gland. For instance, one sees such causes of congestion as masturbation, sexual excess and coitus interruptus given as the actual causative factor in prostatitis.

A few years ago it was generally thought that prostatitis was by far the most common sequel of a posterior urethritis, and that the vesicles, if not palpable, were free from infection. In my opinion, the vesicles as well as the prostate are infected in practically every patient with a posterior urethritis. A slightly inflamed vesicle

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may not be palpable in the same way that a slightly infected prostate may or may not appear normal on rectal examination. One would not expect an epididymitis to occur without vesiculitis, yet clinically many epididymitis cases are unaccompanied by any signs of vesiculitis.

I believe that vesiculitis is not only the principal cause of gonorrhœal rheumatism and gonorrhœal iritis, but is also the most common cause of recurrent gonorrhœal symptoms in the urethral region. Greater vascularity and better drainage are two factors which tend to make prostatitis much less chronic than vesiculitis.

Prostatitis and vesiculitis may be classified under the following headings :—

- (1) As a complication of acute gonorrhœal infection.
- (2) As a complication of a chronic infection which is due to the so-called secondary organisms which accompany or follow the original gonococcal infection.
- (3) As a complication of a descending urinary infection from the kidney.
- (4) As a complication of urethral stricture. Vesiculitis alone may occur as a complication of fibrosis or enlargement of the prostate.
- (5) Cases where the infection is introduced by surgical instruments.
- (6) A hæmatogenous infection taking place as a complication of parotitis, small-pox, etc.

In my opinion gonorrhœa directly, or indirectly through secondary organisms, is the ætiological factor in 90 per cent. or more of the cases. Most books or papers quote the percentage of gonorrhœal cases as much lower than this, and I think that the error arises in two ways :

- (1) A surprisingly large number of these patients will stoutly deny ever having had gonorrhœa ; will in fact state they never had a urethral discharge, but a number of years later they develop iritis or some other complication which, if thoroughly investigated, can be proved to be typically gonorrhœal in origin. I have had numerous cases of this type where the venereal element had been overlooked. I always remember one patient who had been suffering from recurring attacks of iritis. The doctor who investigated his condition stated that he was suffering from a prostatitis which was probably a complication of a *Bacillus coli* infection of the urinary tract.

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After a course of treatment his prostate was pronounced normal, but as there was no improvement in his eye condition he had his tonsils enucleated, his appendix removed and his teeth extracted. These in turn were thought to be the source of the infection, but the various operations had no effect on his iritis, and he was seen by another ophthalmic surgeon, who referred him to me, and said that his eye condition was very suggestive of former gonorrhœal infection. This patient stated that he had never had venereal disease, but when I examined him I found that he had a marked chronic infection of the left vesicle which reacted very well to treatment, and the iritis disappeared. Some time later this patient's brother came to see me concerning urinary symptoms, and on inquiring into his history he informed me that both he and the patient whose condition I have just described had gonorrhœa at the same time, both having been infected by the same girl. My experience leads me to believe that ophthalmic surgeons, generally speaking, are not sufficiently alive to the characteristic appearance and history of cases of iritis due to the later results of gonorrhœa.

(2) In not realising that many of the so-called metastatic infections of the prostate are simply acute recrudescence attacks of a gonorrhœal prostatitis which first appeared many years before.

On looking over the notes of all my patients who were suffering from pyelonephritis I have found that 4 per cent. of them developed prostatitis or vesiculitis. Coliform bacilli were the organisms most frequently found in the urine. I find that prostatitis and vesiculitis in these cases are not nearly so severe or extensive as they are in gonorrhœal infections. Also, as one would expect, they clear up much more quickly in the pyelonephritis patient. Prostatic hypertrophy and small fibrous prostate are sometimes factors in producing a vesiculitis. Prostatic disease may interfere with the normal emptying of the seminal vesicle and may therefore predispose to vesiculitis. Persistence of urinary infection after prostatectomy is sometimes caused by infection of a seminal vesicle.

### TREATMENT

I do not wish to enter into the ordinary methods of treatment, but I should like to emphasise the importance

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of doing everything possible to prevent the inflammation reaching the posterior urethra, more especially in the acute stage. I have found that prostatitis and vesiculitis are not only less frequent, but much less severe when the surgeon carries out all the treatment. If the patient is allowed to irrigate himself, secondary organisms are much more likely to be introduced into the urethra and, therefore, the severity of the disease will be much more pronounced and the duration of the illness will be markedly prolonged. Consequently, in large clinics where the surgeon cannot carry out the treatment entirely himself, he should be particularly careful in the selection and training of assistants. I have always been strongly opposed to patients irrigating themselves at their own home. I have found that you cannot get the average patient to observe the principles of asepsis for any length of time.

Urethral stricture, fibrotic changes in the prostate gland and certain types of fibrosis of the internal or vesical sphincter are, I believe, often, if not always, due to infection of these parts with secondary organisms, and this is therefore an additional reason why we should do our utmost to prevent a non-specific post-gonorrhœal urethritis. In my opinion, if the staphylococcus is the predominant organism, pus is formed in large quantities and healing is accompanied by much fibrosis. On the other hand, *Bacillus coli* infections are accompanied by a discharge which is thin and watery and followed by comparatively little fibrosis. I think I am right in saying that stricture is rare under the modern treatment of gonorrhœa.

Fibrosis followed by stenosis of the internal sphincter is an interesting condition and, if it occurs in conjunction with fibrosis of the prostate, is probably the result of a former inflammation which was gonorrhœal or post-gonorrhœal. Some writers, however, claim that all cases of fibrotic stenosis of the vesical neck are inflammatory in origin and are always the result of a post-gonorrhœal infection. With this I disagree. While a large percentage of them are accompanied by fibrosis of the prostate and are probably inflammatory in origin, I am inclined to think that in a certain proportion of them the fibrotic changes in the internal sphincter are degenerative in origin. The theory of the fibrotic changes being always

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of inflammatory origin lacks proof, for fibrotic stenosis of the vesical neck is met with in men free from the slightest suspicion of infection ; in such cases there is no history of anything to indicate old inflammatory trouble ; while on physical examination, no abnormality which might suggest past infection of the organs adjacent to the vesical neck can be detected. For instance, on rectal examination the condition of the prostate gland is characterised by absence of fixation, elasticity of consistency, regularity of outline and smoothness of surface.

During my last visit to America, a few months ago, that ingenious New York surgeon, Dr. Joseph McCarthy, very kindly demonstrated to me his treatment of intractable prostatitis. He gives intraprostatic injections *viâ* the urethra. The injection is accomplished through a specially constructed needle introduced through his panendoscope under direct vision. He injects 3 to 8 c.c. of electrargol into each lateral lobe, the exact quantity depending upon the amount of intra-prostatic resistance encountered. Both lateral lobes are injected at the first sitting, and after a week's interval the needle is introduced directly in the midline. The number of treatments varies from three to seventeen, and up to date he states he has been well satisfied with the treatment. Some other surgeons, as you are aware, prefer a 1 per cent. aqueous solution of mercurochrome, and advocate the perineal route. They, too, claim satisfactory clinical results.

The next condition I wish to mention is the question of prostatic abscess. In the majority of cases the abscess develops in the course of acute prostatitis and, if left alone, usually ruptures into the urethra, but may burrow into the rectum, peritoneal cavity, ischiorectal fossæ or space of Retzius. Perineal exposure and drainage is the treatment of choice whenever an abscess is definitely diagnosed. I think that free operative drainage in advance of spontaneous rupture is much to be preferred. With intra-urethral rupture the patient is likely to be left with an abscess cavity and a persistent sinus in the posterior urethra. Such patients not only tend to develop prostatic calculi, but also largely form that group of sufferers from chronic prostatitis whom it is found very difficult, if not impossible, to cure.

The last point I wish to raise is the question of treatment of chronic vesiculitis. One meets with cases which

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not only fail to respond to the usual consulting-room or clinic treatment, but also are unaffected by injection of the seminal vesicles which may have been carried out by vasotomy or vas puncture or by catheterisation of the ejaculatory ducts. In such patients, more especially if there is a risk of blindness, I do not hesitate to recommend vesiculectomy. In doing so I realise it is a major procedure and an operation of the last resort, and should only be done when all other measures have failed. In my opinion, in such cases the outlet of the vesicle is sufficiently stenosed to prevent normal emptying of the sac. Consequently there is a condition similar to stenosis of the vesical neck with dilatation of the bladder and residual urine. In the urinary tract one finds that an infection of any particular part will not clear up as long as there is an obstruction below preventing the normal emptying of the part above. This, I feel sure, applies equally to the seminal vesicle.

I have performed the operation of vesiculectomy on three patients and the results have been most satisfactory. Two were suffering from severe chronic arthritis, and one from iritis. I have always used the transvesical route, not the perineal as usually advocated. After the bladder is opened by a median suprapubic incision, the patient is placed in the Trendelenburg position. An incision is then made from the posterior lip of the internal meatus commencing in the middle line and radiating outwards and backwards, but internal to the ureteric orifice of the affected side. The incision is deepened through the muscle of the bladder wall, and the edges raised by dissection.

The vesicle is thus exposed, detached and removed. A small transvesical tube is fixed in the vesicular cavity and a large drainage tube placed in the bladder. The vesical and abdominal wounds are then closed around these two tubes.

In the foregoing observations, which I have had the honour of putting before you, you will have noticed that, knowing my audience are expert in the consulting-room or clinic side of the treatment, I have referred more to the surgical aspect of the subject.

In conclusion, I can only hope therefore that what I have said may have been of some little interest to those present this evening.